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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Yau Wei Lucas Hui

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EXAMINER

RAO, ANAND SHASHIKANT

ART UNIT

PAPER NUMBER

2621

MAIL DATE

DELIVERY MODE

02/10/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/914,171	Applicant(s) HUI ET AL.	
	Examiner Andy S. Rao	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,15,16,18-21,23,24,26,27 and 29-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15,16 and 18-21 is/are allowed.
- 6) ☒ Claim(s) 1,2,23,24,26,27 and 29-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2621

DETAILED ACTION

Response to Entered Amendment After Final

1. As per the applicant's instructions filed on 1/23/09, claims 3-14, 17, 22, 25, 28, have been canceled.
2. The finality of the rejection of the last Office action is withdrawn, so that a new grounds of rejection can be brought forth against pending claims 1-2, 23-24, 26-27, 29-36 as follows below.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-2, 23-24, 26-27, 29-36 are rejected under 35 U.S.C. 101 as not falling within one of four statutory categories of inventions. Supreme Court precedent and recent Federal Circuit decisions indicate a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. For example there is not apparatus mentioned either in the preamble nor in the subsequent limitations for executing the method, nor is the

Art Unit: 2621

create of a first and second frame of the determination of “moving pixels” considered transforming the signals, *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

Allowable Subject Matter

5. Claims 15-16 and 18-21 remain allowed.

The Applicant’s arguments directed towards the features in these claims have been considered persuasive with regards to the tertiary Roeder reference. In particular, the Examiner notes that independent claims 15 is directed towards a method for detecting field characteristics of video data and further recites “...a first subtractor receiving a pixel of said first field and a first pixel of said second field and calculating a first pixel difference; a second subtractor receiving said pixel of said first field and a second pixel of said second field and calculating a second pixel difference; and a comparator selecting a smaller pixel difference between said first and second pixel differences, wherein the accumulator means accumulates said smaller pixel difference...” which is a feature that is not anticipated nor obvious over the art of record.

Independent claim 18 is directed towards a method for detecting field characteristics of video data and further recites “...a moving pixel counter having inputs connected to said input means and the output of said second field memory, and an output connected to said interlaced/progressive decision unit, said moving pixel counter counting moving pixels between said second and third fields and to obtain a count value of the moving pixels, wherein said progressive/interlace decision means includes means for comparing said count value of moving pixels with a moving pixel threshold, and means for defining said first and third fields as progressive if said count value of moving pixels is lower than said moving pixel threshold, and

Art Unit: 2621

for defining said first and third fields as interlaced if said count value of moving pixels is not lower than said moving pixel threshold...” which is a feature that is not anticipated nor obvious over the art of record. Dependent claims 16 and 19-21 are allowed for the reasons concerning the independent claims.

6. Claims 1-2, 23-24, 26-27, 29-36 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action.

Independent claim 1 is directed towards a method of processing video data to detect field characteristics of the data, which further recites “...and calculating the number of moving pixels between said second and third fields, wherein the determining step determining that said first field is an interlaced field if said number lower than a moving pixel threshold, and determining that said first and third fields are progressive if said number is not lower than the moving pixel threshold...” which are features that are not anticipated nor obvious over the art of record.

Independent claim 23 is directed towards a method for detecting field characteristics of video data and further recites “...calculating pixel differences between the pixel of said first field and two pixels of said second field; selecting a smaller pixel difference between said pixel differences; and accumulating said smaller pixel difference...” which is feature that is not anticipated nor obvious over the art of record. Independent claim 27 is directed towards a method of processing video data to detect field characteristics of the data, and further recite “...for each of a plurality of sub-blocks of said first and third fields: detecting a moving region by repeating said moving pixel detection for pixels of the sub-block; if the number of interlaced pixels in said sub-block is higher than a region threshold said sub-block is considered interlaced; and, if more than one sub-block is found interlaced, then said first and third fields are considered

Art Unit: 2621

interlaced...” which are features that are not anticipated nor obvious over the art of record.

Independent claim 31 is directed towards a method for detecting field characteristics of video data and further recites “...determining whether the pixel count value is less than a moving pixel count threshold; and determining whether the first field is an interlaced field or a progressive field with respect to the third field based on whether the pixel count value is less than the moving pixel count threshold...” which is a feature that is not anticipated nor obvious over the art of record. Dependent claims 2, 24, 26, 29-30, 32-36 are allowed for the reasons concerning the independent claims. Accordingly, if claims 1, 23, 27, and 31 are amended to overcome the rejections under 35 U.S.C. 101, the application would be placed in a condition for allowance.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Mehrdad Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andy S. Rao
Primary Examiner
Art Unit 2621

asr
/Andy S. Rao/
Primary Examiner, Art Unit 2621
February 9, 2009